

# **SUPPORT MOBILE DEVICE IN ASYMMETRIC LINK ENVIRONMENT**

## **ABSTRACT OF THE DISCLOSURE**

5           Methods and apparatus for registering a mobile device such as a mobile node or mobile router with a Home Agent in an asymmetric link environment. A Foreign Agent associates each of one or more interfaces of the Foreign Agent with a different care-of address. An agent advertisement including the care-of address for the one or more  
10           interfaces of the Foreign Agent is then sent via one or more uplinks. A registration request is received via a downlink router. The registration request identifies a care-of address associated with one of the one or more interfaces of the Foreign Agent. One of the  
15           interfaces identified by the care-of address is ascertained, thereby identifying the interface to which the mobile device has roamed. The registration request is forwarded to the Home Agent. A registration reply is received from the Home Agent. The registration reply is then forwarded to the mobile device via the ascertained interface.